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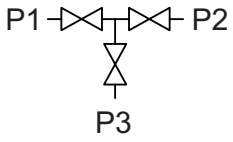
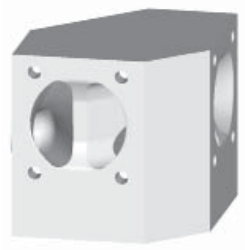
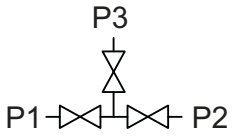
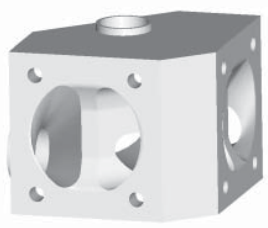
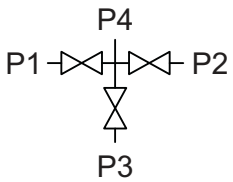
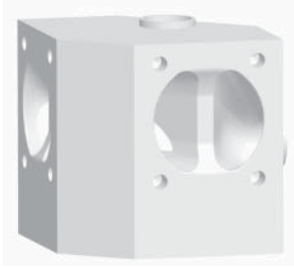
Engineered Valves

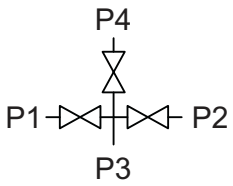
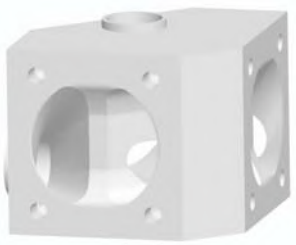
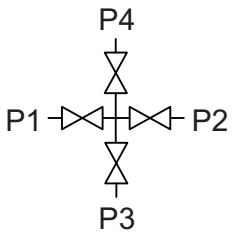
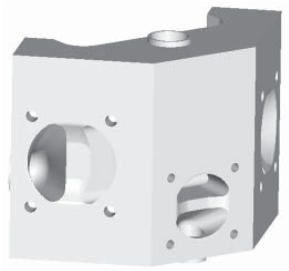
Block & Bleed Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for Block and Bleed hygienic diaphragm valve configurations according to ITT design standards. A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

ITT offers a wide range of standard block valve designs. Contact us for valves, connection options (tri-clamp and butt-weld), and configurations. Visit the Tools and Resources section of our website www.engvalves.com for drawings, literature and other information on our hygienic diaphragm valves.

Figure Number Code	Description	P & ID	3D Isometric
BBD	Block and Bleed With Drain Valve		
BBV	Block and Bleed With vent valve		
BBD VP	Block and Bleed with drain and vent port valve		

Block and Bleed Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
BBV DP	Block and Bleed with vent and drain port valve		
BBDV	Block and Bleed with drain and vent valve		
VSPEC:	Special Block and Bleed valves	Customer Supplied	

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F.B&B.en-US.2016-02

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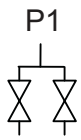
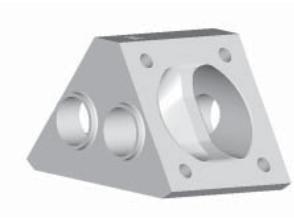
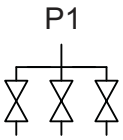
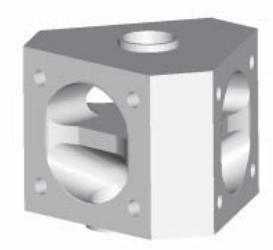
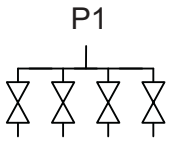
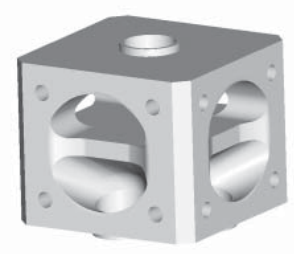
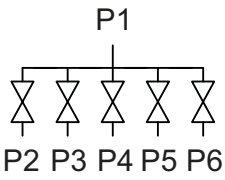
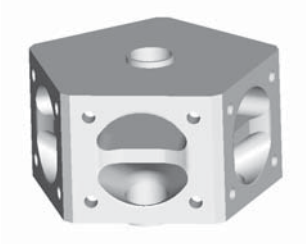
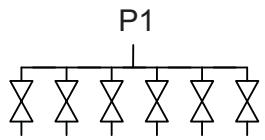
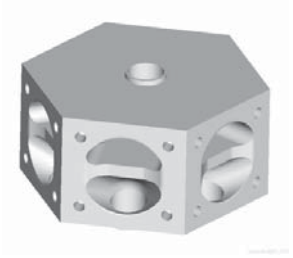
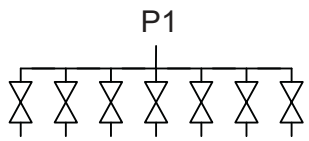
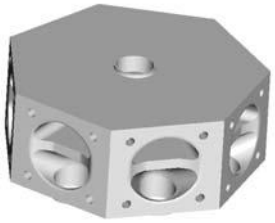
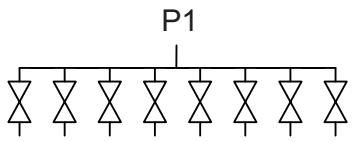
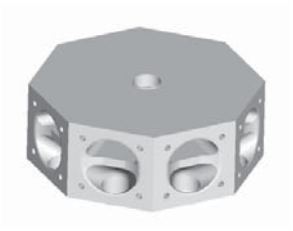
Divert Valves Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for hygienic diaphragm divert valve configurations according to ITT design standards. A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

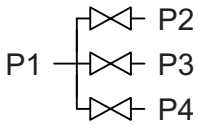
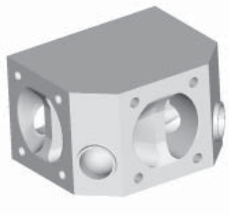
ITT offers a wide range of standard block valve designs. Contact us for valves, connection options (tri-clamp and butt-weld), and configurations. Visit the Tools and Resources section of our website www.engvalves.com for drawings, literature and other information on our hygienic diaphragm valves.

Figure Number Code	Description	P & ID	3D Isometric
DV2W	2 way divert valve (horizontal and vertical)		
DV3W	3 way divert valve (vertical)		
DV4W	4 way divert valve (vertical)		

Divert Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
DV5W	5 way divert valve (vertical)		
DV6W	6 way divert valve (vertical)		
DV7W	7 way divert valve (vertical)		
DV8W	8 way divert valve (vertical)		

Divert Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
HDV3W	3 way divert valve (horizontal, Available in right and left hand)		
VSPEC:	Special divert valves (horizontal and vertical)	Customer Supplied	

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Front Facing Valve Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for Front Facing hygienic diaphragm valve configurations according to ITT design standards. Front facing valves are an ideal solution for installation in areas where space is limited (for example against a wall). A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

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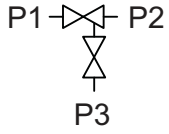
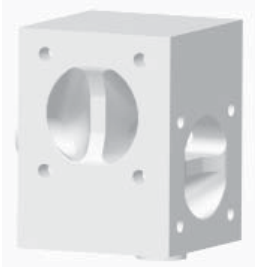
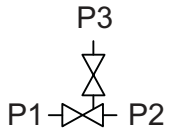
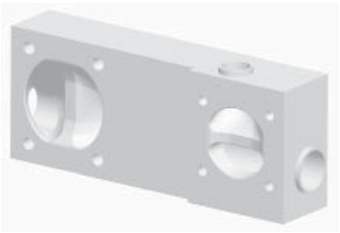
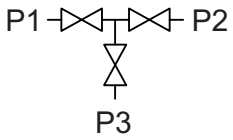
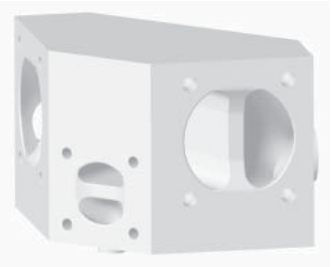
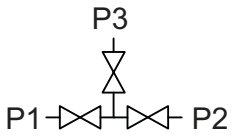
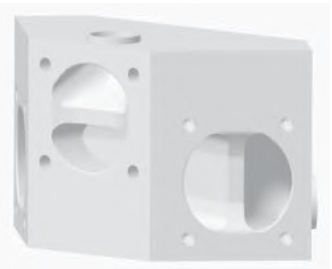
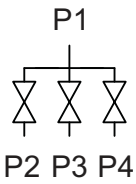
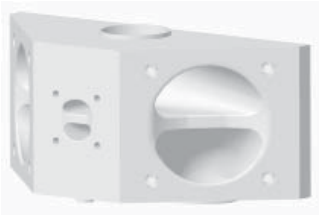
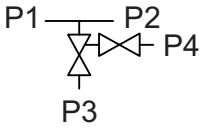
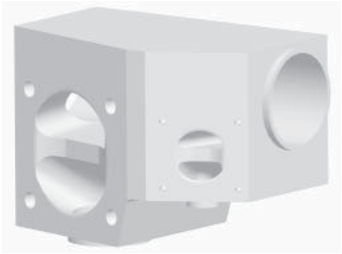
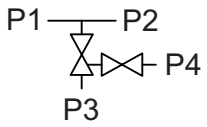
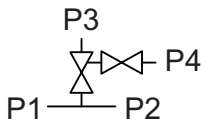
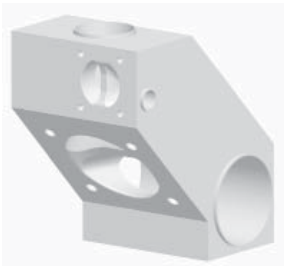
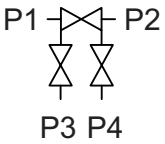
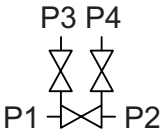
Figure Number Code	Description	P & ID	3D Isometric
ISG FF	Integral sterile access (front facing) valve (available in right hand and left hande)		
INV ISG FF	Inverted integral sterile access (front facing) valve (available in right hand and left hand)		

Front Facing Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
BBD FF	Block and Bleed with drain (front facing) valve		
BBV FF	Block and Bleed with vent (front facing) valve		
DV3W FF	3 way divert (front facing) valve (vertical)		
ZSBBS FF	Zero static with sample (front facing) valve		

Front Facing Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
ZDP FF	Zero static downstream purge (front facing) valve (right and left handed)		
ZID FF	Zero static inverted with drain (front facing) valve (right and left handed)		
IDSA FF	Integral dual sterile access (front facing) valve (orientation down down (DD))		
IDSA FF	Integral dual sterile access (front facing) valve (orientation up up (UU))		

Front Facing Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
VSPEC:	Special (front facing) valves	Customer Supplied	

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Integral Sterile Access Valve Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for Integral Sterile Access hygienic diaphragm valve configurations according to ITT design standards. A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

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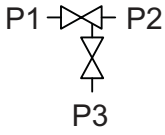
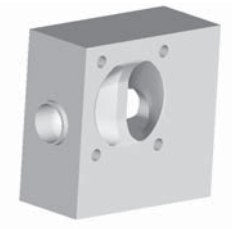
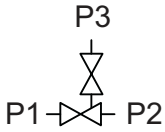
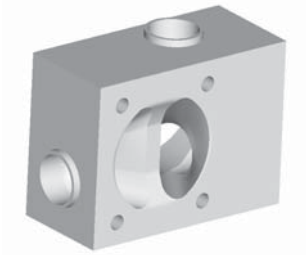
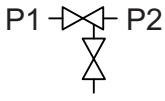
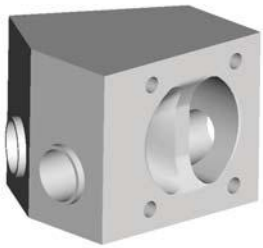
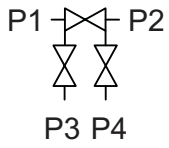
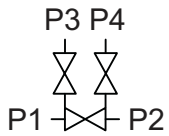
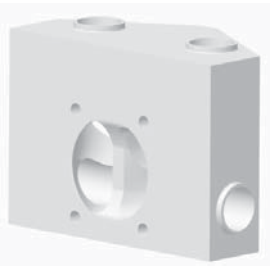
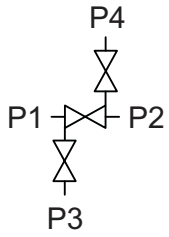
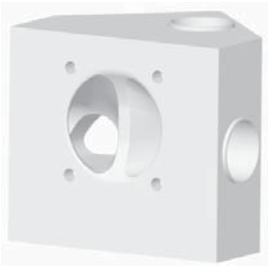
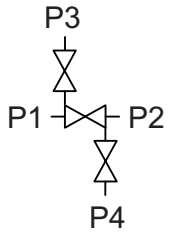
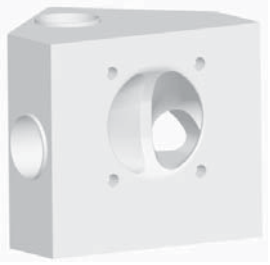
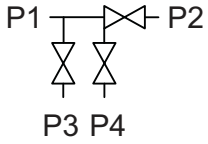
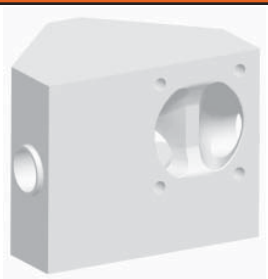
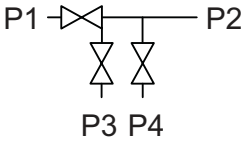
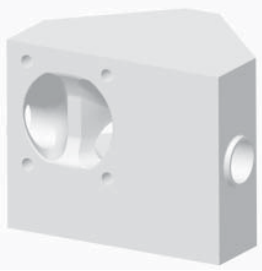
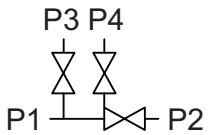
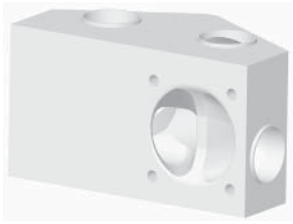
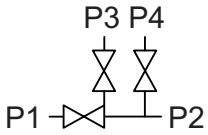
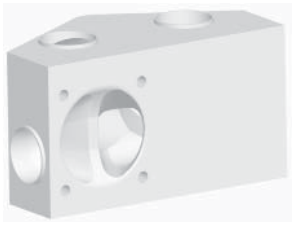
Figure Number Code	Description	P & ID	3D Isometric
ISG	Integral sterile access valve (available in right hand, left hand, right right and left left)		
INV ISG	Inverted integral sterile access valve (available in right hand and left hand)		
IHSA	Integral horizontal sterile access valve (available in right hand and left hand)		

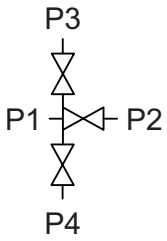
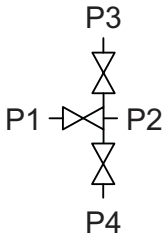
Integral Sterile Access Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
IDSA	Integral dual sterile access valve (orientation down down (DD), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation up up (UU), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation down up (DU), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation up down (UD), vertical and horizontal installation available)		

Integral Sterile Access Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
IDSA	Integral dual sterile access valve (orientation 'P1' down down (DD), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation 'P2' down down (DD), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation 'P1' up up (UU), vertical and horizontal installation)		
IDSA	Integral dual sterile access valve (orientation 'P2' up up (UU))		

Integral Sterile Access Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
IDSA	Integral dual sterile access valve (orientation 'P1' up down (UD), vertical and horizontal installation available)		
IDSA	Integral dual sterile access valve (orientation 'P2' up down (UD), vertical and horizontal installation available)		
VSPEC: IDSA	Specail integral dual sterile access valves (horizontal and vertical)	Customer Suppied	

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Special Valve Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for Special hygienic diaphragm valve configurations according to ITT design standards. A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

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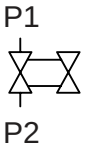
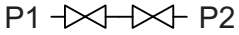
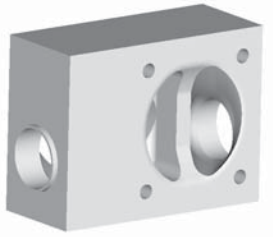
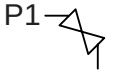
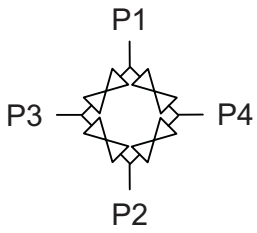
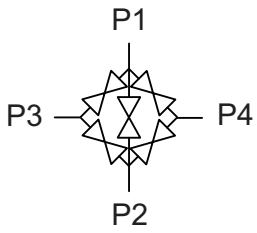
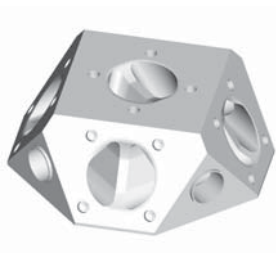
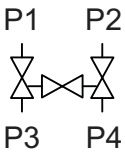
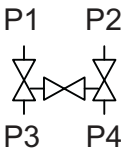
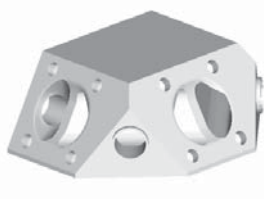
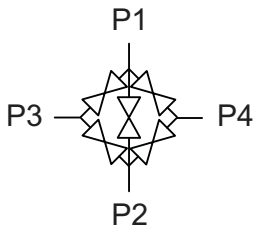
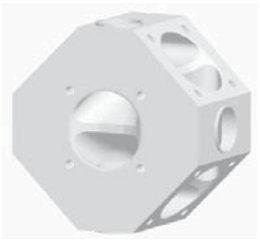
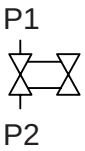
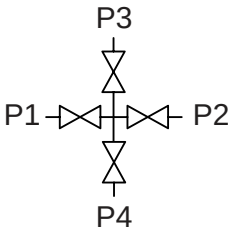
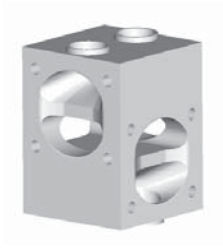
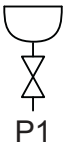
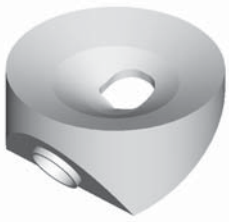
Figure Number Code	Description	P & ID	3D Isometric
BP	By pass valve (0.18 inches [4,6mm] i.d. bypass typ.)		
VSPEC	Dual inline valve (horizontal and vertical)		
M90	90 degree 2 way valve		

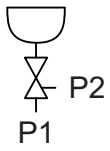
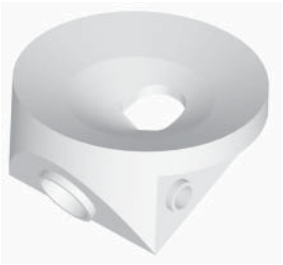
Special Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
CHN	Chromatography without by pass valve		
CHRO	Chromatography with by pass valve		
CRO	Crossover vertically drainable valve (vertical)		
CROD	Crossover horizontally drainable valve (horizontal)		

Special Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
VSPEC	Chromatography with by pass valve		
DF	Dual flow valve		
SB1	Sterile barrier valve		
TBV	Tank bottom valve		

Special Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
VSPEC	Tank bottom valve with sample port (available above or below valve wier)		
VSPEC	Special tank bottom valve (horizontal or vertical, multiple valves)	Customer Supplied	
VSPEC	Special integral valve body valves (horizontal and vertical with multiple valves)	Customer Supplied	

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Zero Static Valve Cross Reference

This cross reference document identifies Piping and Instrumentation Diagrams (P&IDs) for Zero Static hygienic diaphragm valve configurations according to ITT design standards. A figure number code, description, P&ID symbol and 3D isometric image is included below for each valve type. Drawings are available on requests.

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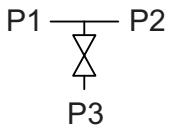
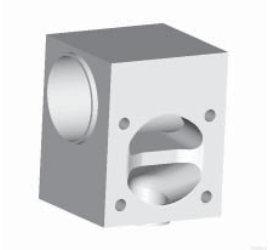
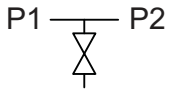
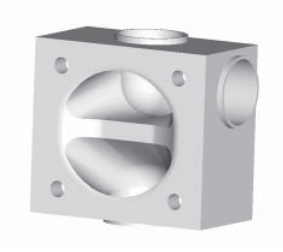
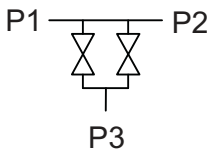
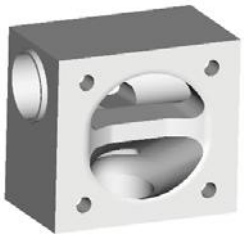
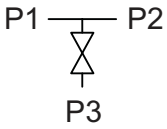
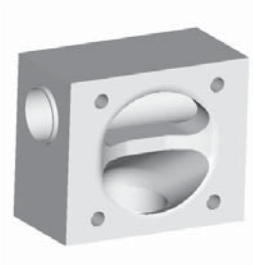
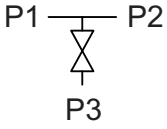
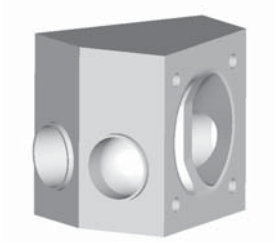
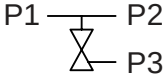
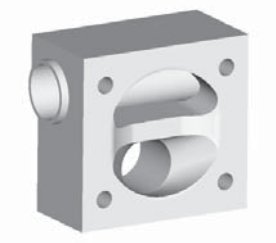
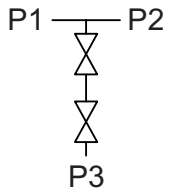
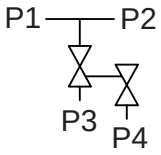
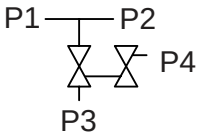
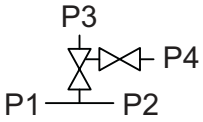
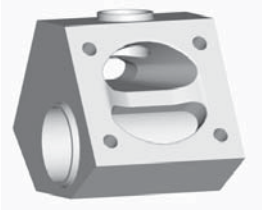
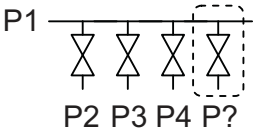
Figure Number Code	Description	P & ID	3D Isometric
ZSBT ZSBBT	Zero static block body tee valve (non faceted)		
Z90	Zero static block body tee valve with 90° mainline (right or left handed)		

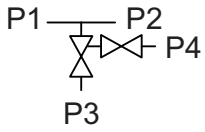
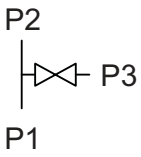
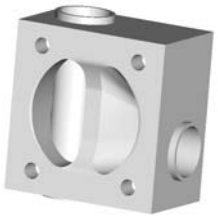
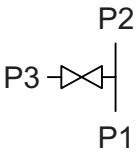
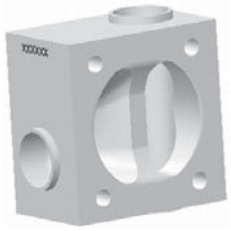
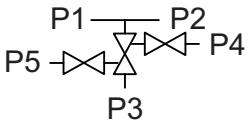
Zero Static Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
VSPEC	Zero static dual flow valve		
ZRB	Zero static reduced block body tee valve (mainline size smaller than valve size)		
HZS	Horizontal zero static block body tee valve		
ZSBBT-BO ZSBT-BO	Zero static block body tee back outlet valve		

Zero Static Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
ZDI	Zero static dual inline valve		
ZDPB	Zero static downstream purge valve (right and left handed), Purge Outlet below Purge weir		
ZDPT	Zero static downstream purge valve (right and left handed), Purge Outlet above Purge weir		
ZID	Zero static inverted with drain valve (right and left handed)		
ZIL	Zero static inline valve (multiple 2,3,4,5...)		

Zero Static Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
ZSBBS	Zero static back to back sample valve (right and left handed)		
ZSBV (RH)	Zero static block body tee vertical mainline valve (offset wier, fully drainable to right hand)		
ZSBV (LH)	Zero static block body tee vertical mainline valve (offset wier, fully drainable to left hand)		
ZUD	Zero static upstream sample/downstream purge valve		

Zero Static Valves Continued

Figure Number Code	Description	P & ID	3D Isometric
VSPEC:	Special zero static valves	Customer Suppied	

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